



#3

1

SEQUENCE LISTING

<110> Reiter, Yoram

<120> SINGLE CHAIN CLASS I MAJOR HISTO- COMPATIBILITY COMPLEXES

<130> 02/23339

<160> 20

<170> PatentIn version 3.0

<210> 1

<211> 9

<212> PRT

<213> Artificial

<220>

<223> synthetic peptide

<400> 1

Ile Met Asp Gln Val Pro Phe Ser Val
1 5

<210> 2

<211> 9

<212> PRT

<213> Artificial

<220>

<223> synthetic peptide

<400> 2

Tyr Leu Glu Pro Gly Pro Val Thr Val
1 5

<210> 3

<211> 9

<212> PRT

<213> Artificial

<220>

<223> synthetic peptide

<400> 3

Leu Leu Phe Gly Tyr Pro Val Tyr Val
1 5

<210> 4

a1

<211> 1048

<212> DNA

<213> Homo sapiens

<400> 4
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 ctgaagaatg gagagagaat tgaaaaagt gagcattcag acttgtcttt cagcaaggac 180
 tggctcttct atctcttgta ttatactgag ttcaccccca ctgaaaaaga tgagtatgcc 240
 tgccgtgtga accacgtgac tttgtcacag cccaagatag ttaagtggga tcgagacatg 300
 ggtggcggtg gaagcggcgg tggaggtct ggtggaggtg gcagcggctc tcaactccatg 360
 aggtatttct tcacatccgt gtcccgcccc ggccgcgagg agccccgctt catcgcatg 420
 ggctacgtgg acgacacgca gttcgtgcgg ttcgacagcg acgccgcgag ccagaggatg 480
 gagccgcggg cgccgtggat agagcaggag ggtccggagt attgggacgg ggagacacgg 540
 aaagtgaagg ccactcaca gactaccga gtggacctg ggacctgcg cggctactac 600
 aaccagagcg aggccggttc tcacaccgtc cagaggatgt atggctgcga cgtgggggtcg 660
 gactggcgct tcctccgcgg gtaccaccag tacgcctacg acggcaagga ttacatcgcc 720
 ctgaaagagg acctgcgtc ttggaccgcg gcggacatgg cagctcagac caccaagcac 780
 aagtgggagg cgccccatgt ggcggagcag ttgagagcct acctggaggg cacgtgcgtg 840
 gagtggctcc gcagatacct ggagaacggg aaggagacgc tgcagcgcac ggacgcccc 900
 aaaacgcaca tgactcacca cgctgtctct gaccatgaag ccaccctgag gtgctggggc 960
 ctgagcttct acctgcgga gatcacactg acctggcagc ggacttgag gaatctttga 1020
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<210> 5

<211> 415

<212> PRT

<213> Artificial

<220>

<223> human beta2 microglobulin linked to MHC class I heavy chain

<400> 5

Met Ile Gln Arg Thr Pro Lys Ile Gln Val Tyr Ser Arg His Pro Ala
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 Glu Asn Gly Lys Ser Asn Phe Leu Asn Cys Tyr Val Ser Gly Phe His
 20 25 30
 Pro Ser Asp Ile Glu Val Asp Leu Leu Lys Asn Gly Glu Arg Ile Glu
 35 40 45
 Lys Val Glu His Ser Asp Leu Ser Phe Ser Lys Asp Trp Ser Phe Tyr
 50 55 60

Leu Leu Tyr Tyr Thr Glu Phe Thr Pro Thr Glu Lys Asp Glu Tyr Ala
 65 70 75 80
 Cys Arg Val Asn His Val Thr Leu Ser Gln Pro Lys Ile Val Lys Trp
 85 90 95
 Asp Arg Asp Met Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly
 100 105 110
 Gly Gly Ser Gly Ser His Ser Met Arg Tyr Phe Phe Thr Ser Val Ser
 115 120 125
 Arg Pro Gly Arg Gly Glu Pro Arg Phe Ile Ala Val Gly Tyr Val Asp
 130 135 140
 Asp Thr Gln Phe Val Arg Phe Asp Ser Asp Ala Ala Ser Gln Arg Met
 145 150 155 160
 Glu Pro Arg Ala Pro Trp Ile Glu Gln Glu Gly Pro Glu Tyr Trp Asp
 165 170 175
 Gly Glu Thr Arg Lys Val Lys Ala His Ser Gln Thr His Arg Val Asp
 180 185 190
 Leu Gly Thr Leu Arg Gly Tyr Tyr Asn Gln Ser Glu Ala Gly Ser His
 195 200 205
 Thr Val Gln Arg Met Tyr Gly Cys Asp Val Gly Ser Asp Trp Arg Phe
 210 215 220
 Leu Arg Gly Tyr His Gln Tyr Ala Tyr Asp Gly Lys Asp Tyr Ile Ala
 225 230 235 240
 Leu Lys Glu Asp Leu Arg Ser Trp Thr Ala Ala Asp Met Ala Ala Gln
 245 250 255
 Thr Thr Lys His Lys Trp Glu Ala Ala His Val Ala Glu Gln Leu Arg
 260 265 270
 Ala Tyr Leu Glu Gly Thr Cys Val Glu Trp Leu Arg Arg Tyr Leu Glu
 275 280 285
 Asn Gly Lys Glu Thr Leu Gln Arg Thr Asp Ala Pro Lys Thr His Met
 290 295 300
 Thr His His Ala Val Ser Asp His Glu Ala Thr Leu Arg Cys Trp Ala
 305 310 315 320
 Leu Ser Phe Tyr Pro Ala Glu Ile Thr Leu Thr Trp Gln Arg Asp Gly
 325 330 335
 Glu Asp Gln Thr Gln Asp Thr Glu Leu Val Glu Thr Arg Pro Ala Gly
 340 345 350
 Asp Gly Thr Phe Gln Lys Trp Ala Ala Val Val Val Pro Ser Gly Gln
 355 360 365
 Glu Gln Arg Tyr Thr Cys His Val Gln His Glu Gly Leu Pro Lys Pro
 370 375 380
 Leu Thr Leu Arg Trp Glu Gln Ser Thr Arg Gly Gly Ala Ser Gly Gly
 385 390 395 400
 Gly Leu Gly Gly Ile Phe Glu Ala Met Lys Met Glu Leu Arg Asp
 405 410 415

<210> 6

<211> 280

<212> PRT

<213> Homo sapiens

<400> 6

Gly Ser His Ser Met Arg Tyr Phe Phe Thr Ser Val Ser Arg Pro Gly
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Arg Gly Glu Pro Arg Phe Ile Ala Val Gly Tyr Val Asp Asp Thr Gln
20 25 30
Phe Val Arg Phe Asp Ser Asp Ala Ala Ser Gln Arg Met Glu Pro Arg
35 40 45
Ala Pro Trp Ile Glu Gln Glu Gly Pro Glu Tyr Trp Asp Gly Glu Thr
50 55 60
Arg Lys Val Lys Ala His Ser Gln Thr His Arg Val Asp Leu Gly Thr
65 70 75 80
Leu Arg Gly Tyr Tyr Asn Gln Ser Glu Ala Gly Ser His Thr Val Gln
85 90 95
Arg Met Tyr Gly Cys Asp Val Gly Ser Asp Trp Arg Phe Leu Arg Gly
100 105 110
Tyr His Gln Tyr Ala Tyr Asp Gly Lys Asp Tyr Ile Ala Leu Lys Glu
115 120 125
Asp Leu Arg Ser Trp Thr Ala Ala Asp Met Ala Ala Gln Thr Thr Lys
130 135 140
His Lys Trp Glu Ala Ala His Val Ala Glu Gln Leu Arg Ala Tyr Leu
145 150 155 160
Glu Gly Thr Cys Val Glu Trp Leu Arg Arg Tyr Leu Glu Asn Gly Lys
165 170 175
Glu Thr Leu Gln Arg Thr Asp Ala Pro Lys Thr His Met Thr His His
180 185 190
Ala Val Ser Asp His Glu Ala Thr Leu Arg Cys Trp Ala Leu Ser Phe
195 200 205
Tyr Pro Ala Glu Ile Thr Leu Thr Trp Gln Arg Asp Gly Glu Asp Gln
210 215 220
Thr Gln Asp Thr Glu Leu Val Glu Thr Arg Pro Ala Gly Asp Gly Thr
225 230 235 240
Phe Gln Lys Trp Ala Ala Val Val Val Pro Ser Gly Gln Glu Gln Arg
245 250 255
Tyr Thr Cys His Val Gln His Glu Gly Leu Pro Lys Pro Leu Thr Leu
260 265 270
Arg Trp Glu Gln Ser Thr Arg Gly
275 280

<210> 7

<211> 100

<212> PRT

<213> Homo sapiens

<400> 7

Met Ile Gln Arg Thr Pro Lys Ile Gln Val Tyr Ser Arg His Pro Ala
 1 5 10 15
 Glu Asn Gly Lys Ser Asn Phe Leu Asn Cys Tyr Val Ser Gly Phe His
 20 25 30
 Pro Ser Asp Ile Glu Val Asp Leu Leu Lys Asn Gly Glu Arg Ile Glu
 35 40 45
 Lys Val Glu His Ser Asp Leu Ser Phe Ser Lys Asp Trp Ser Phe Tyr
 50 55 60
 Leu Leu Tyr Tyr Thr Glu Phe Thr Pro Thr Glu Lys Asp Glu Tyr Ala
 65 70 75 80
 Cys Arg Val Asn His Val Thr Leu Ser Gln Pro Lys Ile Val Lys Trp
 85 90 95
 Asp Arg Asp Met
 100

<210> 8

<211> 36

<212> DNA

<213> Artificial

<220>

<223> synthetic oligonucleotide

<400> 8

aggagatata catatgggct ctcaactccat gaggta

36

<210> 9

<211> 43

<212> DNA

<213> Artificial

<220>

<223> synthetic oligonucleotide

<400> 9

cgggctttgt tagcaccgat tcataggtga ggggcttggg caa

43

<210> 10

<211> 15

<212> PRT

<213> Artificial

<220>

<223> linker peptide

<400> 10

Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
 1 5 10 15

<210> 11

<211> 35

<212> DNA

<213> Artificial

<220>

<223> synthetic oligonucleotide

<400> 11

ggagatatac atatgatcca gcgtactcca aagat

35

<210> 12

<211> 49

<212> DNA

<213> Artificial

<220>

<223> synthetic oligonucleotide

<400> 12

cgggctttgt tagcagccga attcattaca tgtctcgatc ccacttaac

49

<210> 13

<211> 41

<212> DNA

<213> Artificial

<220>

<223> synthetic oligonucleotide

<400> 13

ggaaggcgtt ggcgcatatg atccagcgta ctccaaagat t

41

<210> 14

<211> 50

<212> DNA

<213> Artificial

<220>

<223> synthetic oligonucleotide

<400> 14

ggaagcggcg gtggaggctc tggaggaggt ggcagcggct ctactccat

50

<210> 15

<211> 50

<212> DNA

<213> Artificial

<220>

<223> synthetic oligonucleotide

<400> 15

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50

<210> 16

<211> 43

<212> DNA

<213> Artificial

<220>

<223> synthetic oligonucleotide

<400> 16

gggagaattc ttactcccat ctcagggtga ggggcttggg caa

43

<210> 17

<211> 14

<212> PRT

<213> Artificial

<220>

<223> specific biotinylation peptide sequence

<400> 17

Leu Gly Gly Ile Phe Glu Ala Met Lys Met Glu Leu Arg Asp
1 5 10

<210> 18

<211> 11

<212> PRT

<213> Artificial

<220>

<223> linker

<400> 18

Gln Ser Thr Arg Gly Gly Ala Ser Gly Gly Gly
1 5 10

<210> 19

<211> 100

<212> DNA

<213> Artificial

<220>

<223> synthetic oligonucleotide

<400> 19

cagtaaaagc tttttatcag cctccgaact gtggatgcct ccacgccgaa cctccaccag 60

aaccacctcc ggacccgccca cctccctccc atctcagggt 100

<210> 20

<211> 39

<212> DNA

<213> Artificial

<220>

<223> BirA recognition tag sequence

<400> 20

ggaatctttg aggcaatgaa gatggagctg cgggactga 39

a!

